



**tshingombe
fiston** 1:12 PM (0 minutes
ago)

to **tshingombe,**
tshigombekb, me

```
VERSION 5.00
Begin {C62A69F0-16DC-11CE-9E98-00AA00574A4F} UserForm1
    Caption           = "UserForm1"
    ClientHeight      = 10530
    ClientLeft        = 45
    ClientTop         = 375
    ClientWidth       = 15300
    OleObjectBlob     = "UserForm1 polfin persal peace.frx":0000
    StartupPosition   = 3 'Windows Default
    WhatsThisButton   = -1 'True
    WhatsThisHelp     = -1 'True
End
Attribute VB_Name = "UserForm1"
Attribute VB_GlobalNameSpace = False
Attribute VB_Creatable = False
Attribute VB_PredeclaredId = True
Attribute VB_Exposed = False
Private Sub ComboBox1_Change()

End Sub

Private Sub ComboBox2_Change()

End Sub

Private Sub ComboBox3_Change()

End Sub

Private Sub CommandButton1_Click()

End Sub

Private Sub Frame1_Click()

End Sub

Private Sub Label1_Click()

End Sub
```

```
Private Sub TextBox1_Change()
```

```
End Sub
```

```
Private Sub UserForm_Click()
```

```
End Sub
```

```
Private Sub UserForm_DblClick(ByVal Cancel As MSForms.ReturnBoolean)
```

```
End Sub
```

```
Private Sub UserForm_Error(ByVal Number As Integer, ByVal Description As  
MSForms.ReturnString, ByVal SCode As Long, ByVal Source As String, ByVal  
HelpFile As String, ByVal HelpContext As Long, ByVal CancelDisplay As  
MSForms.ReturnBoolean)
```

```
End Sub
```

```
Private Sub UserForm_KeyUp(ByVal KeyCode As MSForms.ReturnInteger, ByVal  
Shift As Integer)
```

```
End Sub
```

```
Private Sub UserForm_MouseUp(ByVal Button As Integer, ByVal Shift As  
Integer, ByVal X As Single, ByVal Y As Single)
```

```
End Sub
```

```
Private Sub UserForm_RemoveControl(ByVal Control As MSForms.Control)
```

```
End Sub
```

```
Private Sub UserForm_Resize()
```

```
End Sub
```

```
Private Sub UserForm_Scroll(ByVal ActionX As MSForms.fmScrollAction, ByVal  
ActionY As MSForms.fmScrollAction, ByVal RequestDx As Single, ByVal  
RequestDy As Single, ByVal ActualDx As MSForms.ReturnSingle, ByVal  
ActualDy As MSForms.ReturnSingle)
```

```
End Sub
```

```
Private Sub UserForm_Terminate()
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End Sub
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```
Private Sub UserForm_Zoom(Percent As Integer)
```

```
End Sub
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National Center for

Education Statistics

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National Assessments

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the International Assessment of Adult Competencies (PIAAC)

International Assessments

International Assessments

International Activities Program (IAP)

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Early Childhood

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Elementary/ Secondary

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Library Statistics Program

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Postsecondary

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National Postsecondary Student Aid Study (NPSAS) more...

Data Systems, Use, & Privacy

Data Systems, Use, & Privacy

Common Education Data Standards (CEDS) National Forum on
Education Statistics Statewide Longitudinal Data Systems Grant Program -
(SLDS) more...

resources

resources

Distance Learning Dataset Training National Postsecondary
Education Cooperative (NPEC) Statistical Standards Program more...

Data & Tools

Downloads Microdata/Raw Data

Downloads Microdata/Raw Data

Delta Cost Project IPEDS Data Center How to apply for
Restricted Use License Online Codebook

Online Analysis

Online Analysis

ACS-ED Tables Data Lab Elementary Secondary Information System
International Data Explorer IPEDS Data Center NAEP Data Explorer

School and College Search

School and College Search

ACS Dashboard College Navigator Private Schools Public School
Districts Public Schools Search for Schools and Colleges

Comparison Tools

Comparison Tools

NAEP State Profiles (nationsreportcard.gov) Public School
District Finance Peer Search Education Finance Statistics Center IPEDS
Data Center

Questionnaire Tools

Questionnaire Tools

NAEP Question Tool NAAL Questions Tool

Geographic Tools

Geographic Tools

ACS-ED Dashboard ACS-ED Maps Locale Lookup MapEd SAFEMap
School and District Navigator

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Other Tools

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chapter 4

security Management

Illustration of the Cover of Safeguarding Your Technology

Chapter 4 in a Nutshell:

Introduction to Security Management

Commonly Asked Questions

Nurturing Support within the Organization

Planning for the Unexpected

Testing and Review

Implementation and Day-to-Day Maintenance

Security Management Checklist

Effective security strikes a balance between protection and convenience.

Introduction to Security Management

Because system security is the aggregate of individual component security, "system boundaries" must encompass individual users and their workstations. But because personal computers are just that (personal), staff behavior can't always be dictated without potentially hampering

workers' overall productivity. Recall that security policy becomes ineffective if it's so restrictive that legitimate user access is threatened. Thus, a key to successful security implementation is finding a reasonable balance between system protection and user autonomy and convenience. The person responsible for finding that balance and actively promoting organizational security is the security manager. Security management consists of nurturing a security-conscious organizational culture, developing tangible procedures to support security, and managing the myriad of pieces that make up the system. The security manager ensures that administration and staff are aware of their security roles, support security efforts, and are willin

g to tolerate the minor inconveniences that are inevitably a part of system change and improvement. After all, if personnel circumvent security procedures (e.g., write down passwords, share accounts, and disable virus-checking software), they put the entire system at risk.

Important point. Effective system security depends on creating a workplace environment and organizational structure where management understands and fully supports security efforts, and users are encouraged to exercise caution. The security manager leads this effort.

A security manager must:

Communicate to staff that protecting the system is not only in the organization's interests, but also in the best interest of users.

Increase staff awareness of security issues.

Provide for appropriate staff security training.

Monitor user activity to assess security implementation.

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Commonly Asked Questions

Commonly Asked Questions

Q. Can an organization make do without hiring a security manager?

A. Yes, but while a security manager doesn't always need to be hired (especially in smaller organizations), someone must perform the functions of security management all the same. Many organizations prefer to hire a systems administrator and include security management as one of his or her primary duties. This is an acceptable strategy as long as the administrator has sufficient time to dedicate to security management. If, however, routine administrative functions take up a considerable part of the administrator's work day, then the organization will be better served by having someone who is able to focus on system security.

Q. Would assigning a top educational administrator to the security manager role show commitment to system security?

A. Not necessarily. Although top administrators are often entrusted with sufficient authority to be effective security managers, it is quite possible that they do not possess the technical expertise necessary for the job. Security managers are responsible for operationalizing all aspects of system security- a task that requires significant technical competence. A secondary, but important, consideration is that managing system security can demand a great deal of time- time that policy-makers and other top administrators may be unable to devote given their other essential duties. While it is imperative that top administrators are actively committed to security effectiveness, in most cases it makes sense that the day-to-day administration of system security be assigned to a security/systems professional.

Q. Where does the security manager fit into the organizational hierarchy?

A. Just as the title implies, security managers and system administrators are most often considered to serve in a management capacity. The important tasks of developing security regulations, training staff, and monitoring implementation require that the security manager be vested with substantial authority. While the security manager is not to be confused with a superintendent or principal, he or she should be considered to be the system "boss." If the security manager is not able to confidently address security miscues at even the highest levels of the organizational hierarchy, protecting system resources adequately becomes an impossibility.

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**tshingombe
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1:17 PM (0 minutes
ago)

to **tshingombe,**
tshigombekb, me

VERSION 5.00

Begin {C62A69F0-16DC-11CE-9E98-00AA00574A4F} UserForm2

 Caption = "UserForm2"

 ClientHeight = 8820

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 StartPosition = 1 'CenterOwner

 WhatsThisButton = -1 'True

 WhatsThisHelp = -1 'True

End

Attribute VB_Name = "UserForm2"

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Attribute VB_Creatable = False

Attribute VB_PredeclaredId = True

Attribute VB_Exposed = False

Private Sub ComboBox1_Change()

End Sub

Private Sub ComboBox2_Change()

End Sub

Private Sub CommandButton1_Click()

End Sub

Private Sub Label1_Click()

End Sub

Private Sub Label2_Click()

End Sub

Private Sub Label3_Click()

End Sub

Private Sub UserForm_Click()

End Sub

Private Sub UserForm_DblClick(ByVal Cancel As MSForms.ReturnBoolean)

```
Private Sub UserForm_Error(ByVal Number As Integer, ByVal Description As
MSForms.ReturnString, ByVal SCode As Long, ByVal Source As String, ByVal
HelpFile As String, ByVal HelpContext As Long, ByVal CancelDisplay As
MSForms.ReturnBoolean)
```

```
Private Sub UserForm_KeyPress(ByVal KeyAscii As MSForms.ReturnInteger)
```

```
Private Sub UserForm_MouseMove(ByVal Button As Integer, ByVal Shift As Integer, ByVal X As Single, ByVal Y As Single)
```

```
Private Sub UserForm_QueryClose(Cancel As Integer, CloseMode As Integer)
```

```
Private Sub UserForm_RemoveControl(ByVal Control As MSForms.Control)
```

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Private Sub UserForm_Resize()
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```
Private Sub UserForm_Scroll(ByVal ActionX As MSForms.fmScrollAction, ByVal
ActionY As MSForms.fmScrollAction, ByVal RequestDx As Single, ByVal
RequestDy As Single, ByVal ActualDx As MSForms.ReturnSingle, ByVal
ActualDy As MSForms.ReturnSingle)
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Private Sub UserForm_Terminate()  
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Power Factor correction, Motor starters and Variable frequency drives for induction motors.

50Hz Motors on 60Hz and 60Hz Motors on 50Hz
. You can run a 50Hz motor on 60Hz, and a 60Hz motor on 50 Hz provided you adjust the voltage and power ratings to keep the V/Hz constant.

Busbar Calculations

Calculation of ratings for both Aluminium busbars and Copper busbars.

Brushless DC Motors

An introduction to Brushless DC motors.

Compound DC Motors

An introduction to Compound DC motors.

newDahlander Motors

Dual speed Dahlander motors.

Electrical Calculations Software Busbar ratings, Cable ratings, Power Factor Correction calculations, Motor Starting and acceleration Curves, Enclosure Cooling, Genset sizing and numerous metric/imperial conversions.

Enclosure Ventilation Guidelines for the correct cooling ventilation of switchboards and enclosures.

Energy Savers for Induction Motors Energy Saving systems for Induction motors Are they a sham? Do they work?

There seems to be a resurgence in interest in the Nola energy saving algorithm for induction motors, with a number of manufacturers beginning to market "new" and "improved" versions of this technology.

Genset Sizing An introductory paper on the sizing of engines and alternators when used for motor starting supplies.

GSM Alarm GSM Alarm relays can be used to provide alarm text messages from eight channel monitoring and single channel control via text messaging.

GSM Control GSM Control relays can be used to provide basic two channel monitoring and control via text messaging.

Harmonic Filters Harmonic filters are used to reduce the harmonics generated by the input rectifier of VFDs.

Induction Motor Control A Paper on induction motor design covering many aspects of motor design and classification. Motor starting characteristics are explained. Worth a read.

Industrial IO An introductory paper on industrial IO as applied to PLCs, and other electronic devices. Currently covering outputs only, Inputs to follow shortly.

Installing VFDs on Irrigation Pumps for minimum EMC Suggested codes of practice for installing Variable Frequency Drives on irrigation pumps with minimum EMC problems.

Invertek Drives Now available in New Zealand.

Induction Motor Calculations Formula for basic induction motor calculations.

Induction Motor Cogging and Crawling Induction motors will not accelerate to full speed if they either cog or crawl. This page covers the basic theory.

Logic relays Programmable Logic relays are an easy way to create a flexible and low cost control system using minimum components.

Motor Control Forum . Join the Motor control on line forum to discuss motor control technology and problems with like minded experts. Post and answer questions on any aspect of motor control, starters, soft starters, variable speed drives, protection and design. NB this is independant of the email forum above.

Topics currently covered:

- Soft starters
- Variable Speed drives
- Power Factor Correction
- Motor Starting
- Motor Protection
- Energy Saving

Motor Control Mailing List Join the Motor control email forum to discuss motor control technology and problems with like minded experts. Post and answer questions on any aspect of motor control, starters, soft starters, variable speed drives, protection and design.

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Motor Starters A Paper on traditional Electromechanical starters including Direct On Line, Primary resistance, Autotransformer and star delta (wye delta) for induction motors illustrating how to use them and what characteristics can be expected.

NO BS Guide to VFDs and EDM

NO BS Guide to VFDs and EMC

PID Control An introductory paper on PID control.

Horner PLC Horner OCS are industrial PLCs with an integrated graphical HMI panel.

Power Factor Correction Power factor correction of A.C. Induction motors is often poorly understood and more poorly specified.

Power Factor Calculations Power factor correction Calculations

Power Factor Controllers Power factor correction Controllers for bulk displacement power factor correction.

Power Factor Correction for Domestic installations Power factor Correction does not save energy within domestic installations.

Pressure Transducers Pressure transducers are used to measure the pressure/vacuum of liquids and gasses and convert this to an electrical signal which is typically 4-20mA or 0-5V. Pressure transducers are commonly used in pump control systems in conjunction with a VFD to regulate the pressure, but can also be used in conjunction with appropriate logic to provide under and over pressure protection.

Secure Password Store Program for saving encrypted passwords and registration data. Includes a free random password generator.

Series DC Motors An introductory paper on series DC Motors which comprise an armature winding in series with the field windings.

Schrage Motors.
Schrage Motors are variable speed motors.

Shunt DC Motors
An introduction to Shunt DC motors.

Single Phase Motors Information and circuits of common single phase induction motor configurations including capacitor start and run, and induction start motors.

Smart relays, or Logic relays, are essentially a simplified PLC with limited functionality. They are designed to replace a number of standard electromechanical and electronic relays as found in machine automation where the task does not require a full PLC.

Slip Ring Motors An introductory paper on slip ring motors and secondary resistance starters, their control and use.

Soft Starters . An introductory paper on Solid State Soft Starters. - under construction!

new Space Vector Modulation An introductory paper on Space Vector Modulation Techniques for three phase inverters.

Star Delta Starters Theory and applications of start delta (weye delta) starters.

Starting High Inertia Loads Guidelines for selecting starter and motors for starting high inertia loads.

Stray Voltages from VFDs in Dairy Sheds Stray voltages from incorrectly installed VFDs cause major problems with the dairy herd being milked.

VFDs and Harmonics An introductory paper on VFDs and harmonics

Variable Speed Control An introductory paper on Variable Speed Control. covering mechanical and electrical methods.

Variable Frequency Drives An introductory paper on Variable Frequency Drives. This page is under construction.

VFDs and Unscreened Output Cables Screened cables are used between the output of a VFD and the motor to reduce conducted emissions and stray voltages.

VFDs and Energy Saving Using VFDs to save energy.

VFDs and EDM Using VFDs and reducing EDM (Electrical Discharge Machining) bearing damage.

Contact Information

Telephone ++64 27 436 3067

FAX ++64 3 332 5220

Postal address P.O. Box 13-076, Christchurch, New Zealand

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BusBar Rating Software

This Software package is designed to give indicative current ratings and power dissipated for Aluminium and Copper BusBars as used in switchboards and electrical distribution systems. The user is able to specify the thickness and the width of the BusBar for thicknesses above 1mm.

BusBar ratings are based on the expected surface temperature rise of the busbar. This is a function of the thermal resistance of the busbar and the power it dissipates. The thermal resistance of the busbar is a function of the surface area of the busbar, the orientation of the busbar, the material from which it is made, and the movement of air around it. The power dissipated by the bus bar is dependant on the square of the current passing through it, its length, and the material from which it is made.

Optimal ratings are achieved when the bar runs horizontally with the face of the bar in the vertical plane. i.e. the bar is on its edge. There must be free air circulation around all of the bar in order to afford the maximum cooling to its surface. Restricted airflow around the bar will increase the surface temperature of the bar. If the bar is installed on its side, (largest area to the top) it will run at an elevated temperature and may need considerable derating. The actual derating required depends on the shape of the bar. Busbars with a high ratio between the width and the thickness, are more sensitive to their orientation than busbars that have an almost square cross section.

Vertical busbars will run much hotter at the top of the bar than at the bottom, and should be derated in order to reduce the maximum

temperature within allowable limits.

Maximum BusBar ratings are not the temperature at which the busbar is expected to fail, rather it is the maximum temperature at which it is considered safe to operate the busbar due to other factors such as the temperature rating of insulation materials which may be in contact with, or close to, the busbar. Busbars which are sleeved in an insulation material such as a heatshrink material, may need to be derated because of the potential ageing and premature failure of the insulation material.

wpe1.jpg (13183 bytes)

The software provides calculation in both metric and imperial dimensions.

wpe2.jpg (13406 bytes)

The power dissipation in busbars can be calculated for specific currents.

wpe3.jpg (16298 bytes)

The Purchase Price for BusBar Calculations is \$NZ35 or \$US22.

[Click here to download Electrical Calculations \(including busbar calculations\)](#)

[Download Manual Now](#)

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Join the Motor control mailing list to discuss motor control technology and problems with like minded experts.

Motor Control Forum

Online forum for discussion of motor control technologies.

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